

WHAT IS CLAIMED IS:

1. A beverage mixer and dispenser, comprising:

a housing defining a mixing chamber having an upper opening, the housing including an extract container positioned above the upper opening of the mixing chamber and containing a powdery soluble drink extract;

5 a metering device positioned between the extract container and mixing chamber to dispense a desired amount of the drink extract from the extract container into the mixing chamber through the upper opening, for mixing with liquid in the mixing chamber to produce a beverage; and

10 a feed opening exposed at an exterior surface of the housing and leading into the mixing chamber, to allow manual addition of drink additives to the mixing chamber.

2. The beverage mixer and dispenser of claim 1, wherein the upper opening comprises the feed opening.

15 3. The beverage mixer and dispenser of claim 1, wherein the mixing chamber is defined in a chamber housing, the chamber housing being moveable between a first position, in which the upper opening is directly below the metering device, and a second position, in which the feed opening is exposed for adding drink additives.

20 4. The beverage mixer and dispenser of claim 3, wherein the chamber housing is linearly translatable between the first and second positions.

5. The beverage mixer and dispenser of claim 3, wherein the chamber housing is pivotable between the first and second positions, about an axis.

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6. The beverage mixer and dispenser of claim 1, wherein a first portion of the upper opening of the mixing chamber is covered by the extract container, and a second portion of the upper opening forms the feed opening.

7. The beverage mixer and dispenser of claim 6, wherein the portion of the upper opening forming the feed opening is selectively coverable by a moveable lid, such that opening the lid exposes the feed opening.

5 8. The beverage mixer and dispenser of claim 7, wherein the lid is pivotably mounted to the housing.

9. A method of producing and dispensing mixed beverages, the method comprising:

10 providing a housing defining a mixing chamber having an upper opening, the housing including an extract container positioned above the upper opening of the mixing chamber and containing a first powdery drink extract, and a metering device positioned between the extract container and mixing chamber to dispense a desired amount of the drink extract from the extract container into the mixing chamber through the upper opening, for mixing with
15 liquid in the mixing chamber to produce a beverage;

manually introducing a powdery, soluble substance into the mixing chamber through a feed opening leading to the mixing chamber;

introducing hot water into the mixing chamber;

mixing the hot water with the powdery, soluble substance to produce a hot beverage;

20 and

dispensing the hot beverage into a receiving vessel disposed beneath the mixing chamber.

10. The method of claim 9, further comprising metering a desired amount of the
25 first powdery drink extract from the extract container into the mixing chamber, such that the hot beverage contains both the powdery, soluble substance and the drink extract.

11. The method of claim 9, wherein the powdery soluble substance comprises a drink additive.

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12. The method of claim 9, wherein the powdery soluble substance comprises a second drink extract that, when mixed alone with hot water, produces a hot beverage.

13. The method of claim 9, wherein manually introducing the drink additive
5 comprises opening a lid above the feed opening to expose the feed opening, pouring the powdery, soluble substance into the exposed feed opening, and then closing the lid.

14. The method of claim 13, wherein the lid pivots on the housing.

10 15. The method of claim 9, wherein the feed opening comprises at least a portion of the upper opening of the mixing chamber.

16. The method of claim 9, wherein manually introducing the powdery, soluble
15 substance comprises sliding the mixing chamber linearly from its resting position to expose the feed opening, pouring the powdery, soluble substance into the exposed feed opening, and then sliding the mixing chamber linearly to its resting position.

17. The method of claim 9, wherein manually introducing the powdery, soluble
20 substance comprises swiveling the mixing chamber away from its resting position about an axis, thus exposing the feed opening;
pouring the powdery, soluble substance into the exposed feed opening; and
swiveling the mixing chamber about the axis, back to its resting position.

18. The method of claim 9, wherein the housing further comprises a feed
25 chamber, which defines the feed opening, and the feed chamber is connected to the mixing chamber by means of a transport system.

19. A beverage mixer and dispenser, comprising:
a housing defining a mixing chamber having an upper opening, the housing including
30 an extract container positioned above the upper opening of the mixing chamber and containing a powdery soluble drink extract;

means for dispensing a metered amount of the drink extract from the extract container into the mixing chamber through the upper opening, for mixing with liquid in the mixing chamber to produce a beverage; and

5 means for manually adding a soluble substance directly into the mixing chamber through a feed opening.

20. The beverage mixer and dispenser of claim 18, wherein the feed opening comprises at least a portion of the upper opening of the mixing chamber.

10 21. The beverage mixer and dispenser of claim 19, wherein the mixing chamber is moveable between a first position, in which the upper opening is directly below the dispensing means, and a second position, in which the feed opening is exposed for adding drink additives.

15 22. The beverage mixer and dispenser of claim 18, wherein the housing further defines a feed chamber that defines the feed opening, the feed chamber being connected to the mixing chamber by means of a transport system.

20 23. A beverage mixer and dispenser, comprising:
a housing defining
a mixing chamber in which powdery drink extract and hot water are joined to produce hot beverages, the mixing chamber defining a lower outlet; and
a cream chamber disposed below the mixing chamber and arranged to receive hot beverages from the outlet of the mixing chamber;
25 a rotatable mixing rotor disposed within the mixing chamber to mix the hot water and powdery drink extracts; and
a rotatable first cream rotor disposed within the cream chamber to aerate the hot beverage, the cream chamber defining an outlet through which the aerated beverage is dispensed into a receiving vessel for consumption.

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24. The beverage mixer and dispenser of claim 21, further comprising an extract container positioned above the mixing chamber, the extract container containing a quantity of powdery drink extract.

5 25. The beverage mixer and dispenser of claim 22, further comprising a metering device disposed below the extract container for dispensing a metered amount of drink extract from the extract container into the mixing chamber for mixing with hot water.

10 26. The beverage mixer and dispenser of claim 21, wherein the mixing chamber defines an upper opening through which the drink extract is dispensed into the mixing chamber, the housing further defining a feed opening leading into the mixing chamber, for manual addition of drink additives into the mixing chamber.

15 27. The beverage mixer and dispenser of claim 24, wherein the mixing chamber is in a chamber housing moveable between a first position, in which the upper opening is directly below a metering device, and a second position, in which the feed opening is exposed for adding drink additives.

20 28. The beverage mixer and dispenser of claim 24 wherein the housing further defines a feed chamber that defines the feed opening, the feed chamber being connected to the mixing chamber by means of a transport system.

25 29. The beverage mixer and dispenser of claim 25, wherein the housing is linearly translatable between the first and second positions.

30 30. The beverage mixer and dispenser of claim 25, wherein the housing is pivotable between the first and second positions, about an axis.

31. The beverage mixer and dispenser of claim 24, wherein a portion of the upper opening of the mixing chamber is covered by an extract container and another portion of the upper opening forms the feed opening.

32. The beverage mixer and dispenser of claim 24, wherein the other part of the filling opening forming the feed opening is closeable by a lid, and opening such lid makes the feed opening accessible.

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33. The beverage mixer and dispenser of claim 29, wherein the lid is pivoted on the housing.

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34. The beverage mixer and dispenser of claim 21, wherein the lower portion of the mixing chamber is funnel-shaped.

35. The beverage mixer and dispenser of claim 31, wherein the mixing rotor is disposed in the lower portion of the mixing chamber.

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36. The beverage mixer and dispenser of claim 21, wherein the mixing rotor is smooth.

37. The beverage mixer and dispenser of claim 21, wherein the mixing rotor is a circular disk.

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38. The beverage mixer and dispenser of claim 21, wherein the mixing rotor is driven by a shaft extending from a lower surface of the mixing rotor.

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39. The beverage mixer and dispenser of claim 21, wherein the first cream rotor is smooth.

40. The beverage mixer and dispenser of claim 21, wherein the first cream rotor is a circular disk.

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41. The beverage mixer and dispenser of claim 21, wherein the first cream rotor is driven by a shaft extending from a lower surface of the first cream rotor.

42. The beverage mixer and dispenser of claim 21, wherein the first cream rotor is approximately cup-shaped in a non-rotating state, the circumferential edge of the first cream rotor abutting against the dividing wall between the mixing chamber and the cream chamber, thereby creating a seal between the mixing chamber and the cream chamber, and, wherein, in a rotating state, the first cream rotor flattens under centripetal force.

43. The beverage mixer and dispenser of claim 40, further comprising a ring-shaped sealing bead along the circumferential edge of the cup-shaped first cream rotor.

44. The beverage mixer and dispenser of claim 41, further comprising a second cream rotor located below the first cream rotor and rotationally fixed on the drive shaft, and extending approximately radially in a disk shape.

45. The beverage mixer and dispenser of claim 41, wherein the second cream rotor has a larger diameter than the first cream rotor.

46. The beverage mixer and dispenser of claim 21, further comprising a valve disposed between the mixing chamber and the cream chamber to block flow through the outlet of the mixing chamber.

47. The beverage mixer and dispenser of claim 42, wherein the valve comprises a circumferential edge of the first cream rotor.

48. The beverage mixer and dispenser of claim 21, further comprising a water inlet directed into the mixing chamber, the water inlet being arranged to impinge water directly on the mixing rotor.

49. The beverage mixer and dispenser of claim 44, wherein the water inlet directs water into the mixing chamber coaxially along the axis of the mixing rotor.

50. The beverage mixer and dispenser of claim 21, wherein the first cream rotor and the mixing rotor are driven by a single motor, and are arranged coaxially along an axis of rotation.

5 51. The beverage mixer and dispenser of claim 21, wherein the first cream rotor and the mixing rotor are rotatably drivable about a common axis of rotation.

52. A method of producing a mixed beverage, the method comprising:
providing a housing defining
10 a mixing chamber in which powdery drink extract and hot water are joined to produce hot beverages, the mixing chamber defining a lower outlet; and
a cream chamber disposed below the mixing chamber and arranged to receive hot beverages from the outlet of the mixing chamber;
further providing a rotatable mixing rotor disposed within the mixing chamber to mix
15 the hot water and powdery drink extracts;
further providing a rotatable first cream rotor disposed within the cream chamber to aerate the hot beverage;
adding hot water to the mixing chamber;
manually adding a powdery substance to the mixing chamber;
20 activating the mixing and first cream rotors to mix the hot water and powdery substance to form a mixture that flows from the mixing chamber into the cream chamber for aerating to form a hot aerated beverage; and
placing a receiving vessel beneath an outer outlet from the cream chamber, for accumulating the hot aerated beverage.

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53. The method of claim 50, wherein the lower portion of the mixing chamber is funnel-shaped.

54. The method of claim 51, wherein the mixing rotor is disposed in the lower
30 portion of the mixing chamber.

55. The method of claim 50, wherein the mixing rotor is smooth.

56. The method of claim 50, wherein the mixing rotor is a circular disk.

5 57. The method of claim 50, wherein the mixing rotor is driven by a shaft extending from a lower surface of the mixing rotor.

58. The method of claim 50, wherein the first cream rotor is a circular disk.

10 59. The method of claim 50, wherein, in a non-rotating state, the first cream rotor is approximately cup-shaped with its circumferential edge enclosing the lower outlet of the mixing chamber, the circumferential edge abutting against the dividing wall between the mixing chamber and the cream chamber in a sealing fashion, and, wherein, in a rotating state, the first cream rotor flattens under centripetal force.

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60. The method of claim 58, wherein a ring-shaped sealing bead is attached along the circumferential edge of the cup-shaped first cream rotor.

61. The method of claim 50, wherein there is located below the first cream rotor a
20 second cream rotor rotationally fixed on the drive shaft which extends approximately radially in a disk shape.

62. The method of claim 51, wherein the diameter of the second cream rotor is larger than the diameter of the first cream rotor.

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63. The method of claim 50, further comprising providing a valve disposed between the mixing chamber and the cream chamber to block flow through the outlet of the mixing chamber.

30 64. The method of claim 60, wherein the valve comprises a circumferential edge of the first cream rotor.

65. The method of claim 60, further comprising providing a water inlet directed into the mixing chamber and arranged to impinge water directly on the mixing rotor.

5 66. The method of claim 62, wherein the water inlet directs water into the mixing chamber coaxially along the axis of the mixing rotor.

67. The method of claim 50, wherein the first cream rotor and the mixing rotor are spaced apart along a single drive shaft extending from a drive motor.

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68. The method of claim 66, wherein the drive motor is an electrical motor disposed below the cream chamber.

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